arts...Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claim 1 is deemed to be directed to non-statutory subject matter." *See* Office Action ¶7, page 3; ¶12, page 6.

Applicant notes that there have been recent changes in United States Patent and Trademark Office (PTO) rules and procedures in assessing patent eligible subject matter under §101 since the issuance of the Office Action. The PTO's rules and procedures for determining whether a claim recites patent-eligible subject matter under § 101 are now more consistent with the law, particularly judicial law.

The Court of Appeals Federal Circuit (CAFC) has held that an invention is patent-eligible subject matter if it produces a "useful, concrete, tangible result." (*State Street Bank and Trust v. Signature Financial Group*, (Fed. Cir. 1998). Until recently, the United States Patent and Trademark Office (PTO) was imposing an additional "technological arts" test in determining whether a claim was eligible for patenting.

In a recent decision, *Ex Parte Lundgren*, Appeal No. 2003-2008, the Board of Patent Appeals and Interferences (BPAI) considered whether a patent claim was eligible subject matter under §101. The Examiner had argued that "both the invention and the practical application to which it is directed to be outside the technological arts, namely an economic theory expressed as a mathematical algorithm without the disclosure or suggestion of computer, automated means, apparatus of any kind, the invention as claimed is found non-statutory." *Lundgren*, page 4. The BPAI unambigously rejected this argument, holding that "there is currently no judicially recognized separate 'technological arts' test to determine patent eligible subject matter under § 101. We decline to propose to create one. Therefore, it is apparent that the examiner's rejection can not be sustained." *Lundgren*, page 9.

Shortly after this holding, the PTO issued Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility. Annex III of the Interim Guidelines, titled Improper Tests For Subject Matter Eligibility, explicitly indicates that the "(A) "not in the technological artstest," (C) mental step or human step tests" and the "(D) machine implemented test" are "**not** to be applied by examiners in determining whether the claimed invention is patent eligible subject matter" (Page 42; emphasis in original). The Guidelines further indicate that "United States patent law does not support the application of a 'technical aspect' or

'technological arts' requirement'" (Guidelines Page 42). Further, the Guidelines specify that "[i]t is immaterial whether the process may be performed by some or all steps that are carried out by a human." (Guidelines, Page 47). "Whether a claim recites a machine implemented process is not determinative of whether that process claim is statutory." (Guidelines, Page 48)

Pursuant to the holding in *Ex Parte Lundgren* and the Interim Guidelines, the rejection of claims 1-10 under §101 is improper. The §101 rejection set forth in the Office Action is the type of technological arts rejection that the BPAI categorically eliminated in *Ex Parte Lundgren*. Moreover, the PTO has explicitly instructed Examiners to no longer use the technological arts test, the mental or human step tests, and the machine-implemented test employed in the Office Action.

During the telephone interview, Applicant pointed out that under the Guidelines the "technological arts" test is improper and the Examiners agreed to withdraw the rejection.

Rejection Under 35 U.S.C. §102

The Office Action rejected claims 1-31 under 35 U.S.C. §102(b) as purportedly being unpatentable over Connelly (6,459,953). Applicant respectfully traverses this rejection.

Connelly is directed to a business reply mail processing system (Col. 2, lines 65-67). As shown in Figure 5, business reply mail pieces may be fed into the system and scanned to generate an image of the business reply mail piece (Col. 5, lines 6-33). Data may be captured from the image of the business reply mail piece and electronically stored so that the information on the business reply mail piece need not be manually entered (Col. 5, lines 34-47).

Claims 1 and 11 both recite, "receiving a stream of mail pieces that includes at least one business reply mail piece and at least one non-business reply mail piece." Claim 21 is directed to a sorting apparatus that includes, "at least one feeder unit that receives a stream of mail pieces that includes at least one business reply mail piece and at least one non-business reply mail piece."

Applicants maintain that the system of Connelly does not receive a general stream of mail that includes both business reply mail pieces and non-business reply mail pieces. Rather, the system of Connelly only processes business reply mail. Nowhere does Connelly disclose or suggest that any type of mail other than business reply mail is processed by the business reply mail processing system.

Applicant notes that Connelly discloses a dedicated business reply mail system that does not process non-business reply mail pieces. Indeed, the title of the Connelly Patent is "Reply Mail Processing System." The Background of the Invention indicates that there is a need for **business reply mail** processing systems, stating "[t]herefore, the large volume of business reply mail handled today has created the need for improved systems capable of processing large volumes of business reply mail to rapidly acquire the information that each reply mail piece contains and initiate appropriate follow up activity. Furthermore, there is a need for a flexible system that can accommodate the requirements of different business reply mail processing applications without undue costs and delays due to customization and setup." *See* column 1, lines 44-52. The Summary of the Invention also indicates that the system of Connelly processes only business reply mail, stating, "[t]he present invention provides a business reply mail processing system, a method of processing business reply mail and a data structure for use in processing business reply mail." *See* column 1, lines 56-59.

The entire disclosure of Connelly relates to how business reply mail pieces are processed and does not discuss how any other type of mail piece may be handled. Every single figure included in the application relates specifically to business reply mail. Figure 1 is schematic of a business reply mail processing system; Figures 2A, 2B, 2C, 2D, and 3 are illustrations of examples of business reply mail pieces. Figure 4 is a schematic representation of a database structure that includes information used to process business reply mail pieces; Figure 5 is a flow diagram of a routine for capturing data from a business reply mail piece; and Figure 6 is a flow diagram of post-processing routine for processing the data captured from business reply mail pieces. That is, Connelly is directed to a system that processes business reply mail pieces, captures data from business reply mail pieces, and processes the data captured from business reply mail pieces. Nowhere does Connelly disclose or suggest that mail pieces other than business reply mail pieces are processed.

During the telephone interview, Applicant discussed the assertion in the Office Action that Connelly discloses receiving a mail stream that includes both business reply mail pieces and non-business reply mail pieces at column 3, lines 20-23, which states, "[b]undles of mail pieces (not shown), such as: business reply cards, post cards, and the like, are loaded by an operated into the processing system 100 at the input feeder module 102." *See* Office Action, page 7.

Applicant indicated that the post cards referred to in this paragraph appear to be business reply post cards and are not business reply mail. Applicant further indicated that Connelly does not discuss processing a general mail stream that includes both business reply mail and non business reply mail, how one would differentiate between these two types of mail pieces, how these types of mail pieces would be separated from each other and handled differently, or any other details pertinent to a system that processes both business reply mail and non-business reply mail.

In response, the Examiners indicated that they would take a closer look at the reference and call Applicant's representative for a second interview later in the day. Examiner Hayes and Examiner Bass telephone Applicant later in the day for a second interview. During the second interview, the Examiners indicated that they had more closely reviewed the Connelly patent and believed that Connelly discloses processing non-business reply mail pieces at column 3, lines 58-62, which states, "[t]he output module 108 includes a plurality of output bins (not shown) for collecting the mail pieces that have been properly processed and an outsort bin for mail pieces that cannot be properly read via machine reading techniques." Examiner Hayes indicated that, based on this paragraph, he believes that if one were to feed a plain envelope (i.e., a non-business reply mail piece) into the business reply mail processing system of Connelly, this envelope would be processed and sorted into the outsort bin for mail pieces that cannot be properly read via machine reading techniques.

Applicant indicated that the above-cited passage does not relate to non-business reply mail pieces, but simply relates to business reply mail pieces that cannot be read via machine reading techniques. Further, Connelly simply does not disclose feeding non-business reply mail pieces into the mail processing system. As should be clear from the discussion above, Connelly relates only to feeding and processing business reply mail pieces. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Connelly simply does not disclose feeding non-business reply mail pieces into the mail processing system. Indeed, it makes little sense that non-business reply mail pieces would be fed into the system, as the system is dedicated to handling business reply mail pieces and these mail pieces are fed in to the system by a human operator. *See* column 3, lines 21-23.

Thus, Connelly fails to disclose, "receiving a stream of mail pieces that includes at least one business reply mail piece and at least one non-business reply mail piece," as recited in independent claims 1 and 11. Connelly also fails to disclose a sorting apparatus that includes, "at least one feeder unit that receives a stream of mail pieces that includes at least one business reply mail piece and at least one non-business reply mail piece," as recited in independent claim 21. Therefore, independent claims 1, 11, and 21 patentably distinguish over Connelly. Accordingly, it is respectfully requested that the rejection of claims 1, 11, and 21 under 35 U.S.C. §102(e) be withdrawn.

Claims 2-10 depend from claim 1, claims 12-20 depend from claim 11, and claims 22-31 depend from claim 21. Each of these claims is patentable for at least the same reasons as its respective independent claim. Accordingly, it is respectfully requested that the rejection of these claims under 35 U.S.C. §102(e) be withdrawn.
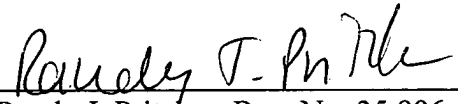
CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,
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